

# Differentiated Instruction

<http://www.cast.org/ncac/index.cfm?i=2876>

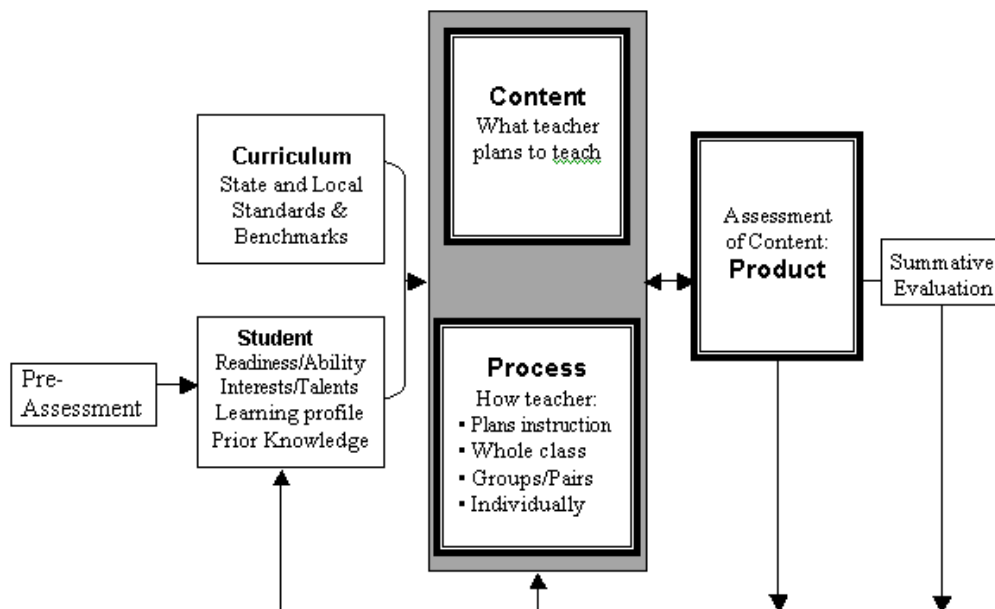
By Tracey Hall, Ph.D., Senior Research Scientist, NCAC

## Introduction

Not all students are alike. Based on this knowledge, differentiated instruction applies an approach to teaching and learning so that students have multiple options for taking in information and making sense of ideas. The model of differentiated instruction requires teachers to be flexible in their approach to teaching and adjusting the curriculum and presentation of information to learners rather than expecting students to modify themselves for the curriculum. Classroom teaching is a blend of whole-class, group and individual instruction. Differentiated Instruction is a teaching theory based on the premise that instructional approaches should vary and be adapted in relation to individual and diverse students in classrooms.

## Definition

To differentiate instruction is to recognize students varying background knowledge, readiness, language, preferences in learning, interests, and to react responsively. Differentiated instruction is a process to approach teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is, and assisting in the learning process.



(adapted from Oakesford, L. & Jones, L., 2001)

## **How to Plan For Differentiate Instruction**

<http://www.teach-nology.com/tutorials/teaching/differentiate/planning/>

### **Step 1- Know Your Students**

#### **Determine the ability level of your students.**

This can be done by surveying past records of student performance to determine capabilities, prior learning, past experiences with learning, etc.

#### **Survey student interests.**

It is also important to get to know your students informally. This can be done by an interest inventory, an interview/conference, or asking students to respond to an open-ended questionnaire with key questions about their learning preferences (depending on the age group).

#### **Is behavior management a problem?**

This is key when planning for activities that require less structure. However, it is still important to determine learning styles and preferences for students who may have a hard time controlling their behaviors. Sometimes knowing preferences can help to motivate students to attend to any tasks that are presented.

### **Step 2- Have a Repertoire of Teaching Strategies**

*Because "one size does not fit all," it is imperative that a variety of teaching strategies be used in a differentiated classroom. Among many teaching strategies that can be considered, there are four worth mentioning: direct instruction, inquiry-based learning, cooperative learning, and information processing models.*

#### **Direct Instruction**

This is the most widely used and most traditional teaching strategy. It is teacher centered and can be used to cover a great amount of material in the amount of time teachers have to cover what students need to learn. It is structured and is based on mastery learning.

More information can be found on:

<http://www.teach-nology.com/teachers/methods/models/>

#### **Inquiry-based Learning**

Inquiry-based learning has become very popular in teaching today. It is based on the scientific method and works very well in developing critical thinking and problem solving skills. It is student centered and requires students to conduct investigations independent of the teacher, unless otherwise directed or guided through the process of discovery. For more information, go to: <http://www.teach-nology.com/currenttrends/inquiry/>

#### **Cooperative Learning**

Probably one of the most misunderstood strategies for teaching is "cooperative learning." Yet, if employed properly, cooperative learning can produce extraordinary results in learning outcomes. It is based on grouping small teams of students heterogeneously according to ability, interest, background, etc. However, one of the most important features of cooperative learning is to pick the best strategy that will be

used to assign the task for students to accomplish. The more popular strategies include Jigsaw II, STAD-Student Teams, or Group Investigation. For more information, go to: [http://www.teach-nology.com/currenttrends/cooperative\\_learning/](http://www.teach-nology.com/currenttrends/cooperative_learning/)

### Information Processing Strategies

Teaching students "how to" process information is a key factor in teaching students how to strategically organize, store, retrieve, and apply information presented. Such strategies include, but are not limited to, memorization, KWL, reciprocal teaching, graphic organizing, scaffolding, or webbing. More information on this topic can be found at:

[http://www.teach-nology.com/teachers/methods/info\\_processing/](http://www.teach-nology.com/teachers/methods/info_processing/)

### **Step 3- Identify a Variety of Instructional Activities**

Engaging students in the learning process using activities that motivate and challenge students to remain on task is probably one of the most frustrating events in the teaching learning process. But if you know your students' profiles, you have a better chance at keeping them on task to completion of any given assignment or activity. In a differentiated classroom, activities are suited to the needs of students according to the mixed ability levels, interests, backgrounds, etc. For example, if you have English language learners in your class, you need to provide activities that are bilingual in nature or that provide the necessary resources for students to complete the activity with success. Good activities require students to develop and apply knowledge in ways that make sense to them and that they find meaningful and relevant. Ideas for activities can be found at:

[http://www.teach-nology.com/teachers/lesson\\_plans/](http://www.teach-nology.com/teachers/lesson_plans/)

### **Step 4- Identify Ways to Assess or Evaluate Student Progress**

Once again, we cannot assume that "one size fits all." As a result, varying means of student assessment is necessary if students are to be given every opportunity to demonstrate authentic learning. Authentic assessment has been around for a long time and is now taking the limelight as we attempt to measure students' progress in a fair and equitable way. A variety of assessment techniques can include portfolios, rubrics, performance-based assessment, and knowledge mapping. For more information on this topic go to: [http://www.teach-nology.com/currenttrends/alternative\\_assessment/](http://www.teach-nology.com/currenttrends/alternative_assessment/)

### **The Bottom Line**

Differentiated instruction is about using teaching strategies that connect with individual student's learning strategies. The ultimate goal is to provide a learning environment that will maximize the potential for student success. The important thing to remember is to hold on to the effective teaching strategies that lead students to positive learning outcomes and to make adjustments when necessary. It's about being flexible and open to change. It's also about taking risks and trying teaching and learning strategies that you would have otherwise ignored. It's about managing instructional time in a way that meets the standards and also provides motivating, challenging, and meaningful experiences for school age students who are socialized to receive and process information in ways that require differentiation of experience. These are very exciting times for the teaching

profession, we are faced with a generation of learners who are challenging us to think about how we deliver instruction.

---

### Multiple Intelligences:

For information regarding MI Theory:

[www.thomasarmstrong.com/multiple\\_intelligences.htm](http://www.thomasarmstrong.com/multiple_intelligences.htm)

[www.ldpride.net/learningstyles.MI.htm](http://www.ldpride.net/learningstyles.MI.htm)

[www.education-world.com/a\\_curr/curr054.shtml](http://www.education-world.com/a_curr/curr054.shtml)

- Intrapersonal Intelligence (self-smart, introspective child)
- Interpersonal Intelligence (people smart, social child)
- Linguistic/Verbal Intelligence (word smart, linguistic child)
- Bodily/kinesthetic Intelligence (movement smart, athletic child)
- Logical/Mathematical Intelligence (logic smart, mathematical child)
- Musical/Rhythmic Intelligence (music smart, musical child)
- Spatial/Visual Intelligence (picture smart, artistic child)

### Ideas for Running Centres or Stations

There are many types of centres. Some ideas are provided below:

- Stationary centres – an activity centre placed in the classroom, as an aside to support subject area learning. Students are free to explore the centre during free-time etc.
- Rotating activity centres – a set of topic-oriented activities to be completed by small groups of students during a subject area timeslot. Sometimes students are placed into groups of 3-4 students and are provided with centre supplies and instructions to be completed during one class. The students rotate through the centres over a period of classes. All students complete all centres. The benefit of this approach is that a limited amount of supplies are needed. Although extensive planning is required initially, once the centres are prepared, teachers can run the centres without much upkeep over the course of a number of days. Students are given an opportunity to work cooperatively.

- Student interest centres – numerous centres for individual study. Students are provided with a selection of activities from which to choose and to complete individually. Students often show increased levels of motivation when they are given the opportunity to take ownership for their learning. Teachers can set requirements for completion (a certain number of activities or types of activities).

*Centres are wonderful for differentiating instruction. Teachers can organize activities according to skill level, interest level, multiple intelligences, and/or content focus. Centres foster independence within a cooperative learning environment. Centres can be used in any subject area. For example, the science and technology resources provide ideas for centres.*

### **Instructional Methods:**

Effective teachers vary their instructional methods.

